



Ministry of
Northern Development
and Mines

Mines and
Minerals
Division

GEOLOGICAL DATA INVENTORY FOLIO

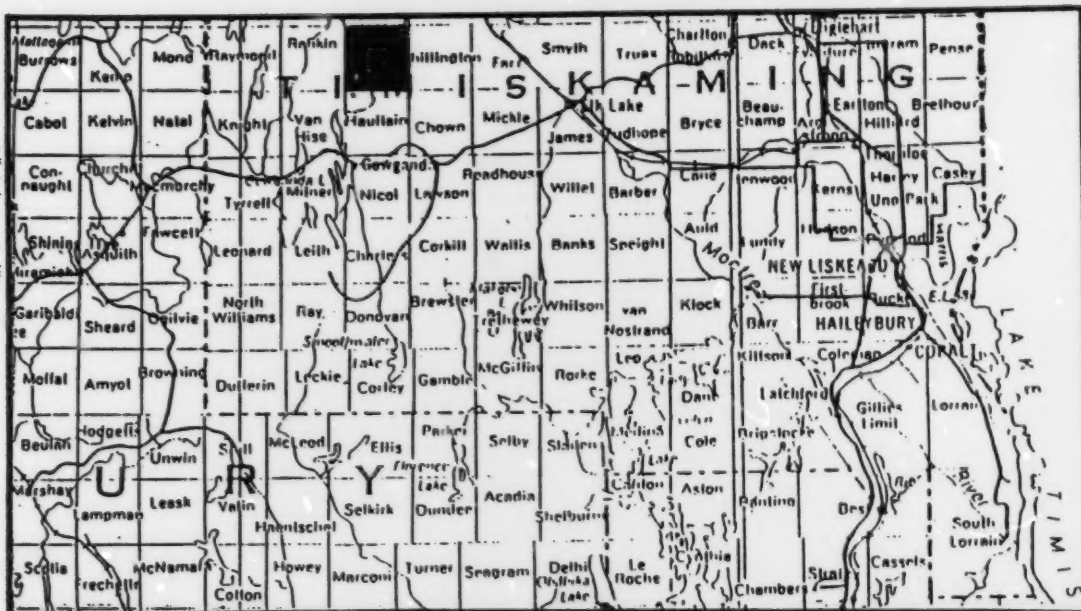
GDIF 576

MOREL TOWNSHIP

LARDER LAKE MINING DIVISION

NTS No. 41P/15

Compiled by the staff of
the Resident Geologist's Office
COBALT



LOCATION MAP



This project is part of the five year Canada-Ontario 1985 Mineral Development Agreement (COMDA), a subsidiary agreement to the Economic and Regional Development Agreement (ERDA) signed by the governments of Canada and Ontario.

Mining Claim Map Number M.238

This project was funded under the Canada Ontario Mineral Development Agreement (COMDA), 1985-1990.

STATEMENT: This inventory is unedited. Discrepancies may occur for which the Ontario Ministry of Northern Development and Mines does not assume liability. Information from this source may be quoted if credit is given. Reference to this inventory should be made as follows:

Ontario Geological Survey 1991. Morel Township, Geological Data
Inventory Folio 576 ; compiled by the staff of the Resident
Geologist's Office, Cobalt.

Original Compilation by: Anderson, Patricia, January 1990.

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ACCOMPANYING MAPS (see map legends on outside back cover).

A. Files Index Map (s) Map A-1

B. Exploration Data Map (s) Map B-1

ABBREVIATIONS LIST

A.F.R.O.	Assessment Files Research Office (Toronto)
Ann. Rept. (A.R.)	Annual Report
A.R.I.P.	Aggregate Resources Inventory Paper
Bull.	Bulletin
C.I.M.M.	Canadian Institute of Mining and Metallurgy
C.J.E.S.	Canadian Journal of Earth Sciences
C.M.J.	Canadian Mining Journal
Econ. Geol.	Economic Geology
E.M.R.	Department of Energy, Mines and Resources
E.P.B.	Earth Physics Branch
G.A.C.	Geological Association of Canada
GC	Geological Circular
GDIF	Geological Data Inventory Folio
Geol.	Geology
Geol. Soc. Amer. Bull.	Geological Society of American Bulletin
GR	Geoscience (Geological) Report
GSC	Geological Survey of Canada
I.L.S.G.	Institute on Lake Superior Geology
IMR	Industrial Mineral Report
I.O.C. (I.O.)	Report of the Iron Ore Committee (1923)
Jour. (or J)	Journal
MDC	Mineral Deposit Circular
M.D.I. (R)	Mineral Deposit Inventory (Record)
Mem	Memoir
MNDM	Ministry of Northern Development and Mines
MNR	Ministry of Natural Resources
MP	Miscellaneous Paper
MRC	Mineral Resources Circular
N.M.I.	National Mineral Inventory
NOEGTS	Northern Ontario Engineering Geology Terrain Study
NTS	National Topographic System
O.B.M.	Ontario Bureau of Mines
O.D.L.F.	Ontario Department of Lands and Forests
ODM	Ontario Department of Mines/Ontario Division of Mines
ODMNA	Ontario Department of Mines and Northern Affairs
OFR	Open File Report
OGS	Ontario Geological Survey
P.R.	Preliminary Report
Prelim. (or P)	Preliminary
R.C.	Royal Commission on Mineral Resources of Ontario (1890)
S.M.D.R.	Source Mineral Deposit Record
SOEGTS	Southern Ontario Engineering Geology Terrain Study
Sum. Rept.	Summary Report
Nip. Dist.	Nipissing District
Sud. Dist.	Sudbury District
Tim. Dist.	Timiskaming District
N.O.	Report of the Survey and Exploration of Northern Ontario, 1900
Ont.	Ontario
AF	Assessment Files

*

DATA SOURCES CHECK LIST			
NOTE: The following sources have been searched to compile the data for this area. If no reference data was found the appropriate box is marked 'no'; if reference data was found, the box is marked 'yes'.		All reference data found are included in the following pages. If the box is blank, the data source has not yet been searched. If the box is marked N.A., the source item is Not Applicable to this area and therefore not searched.	
SOURCES OF DATA		Data	Initial
1	Resident Geologist's Office Files	Yes	D.P.A.
2	Assessment Files Research Office, Toronto	No	D.P.A.
3	OGS/ODM General Index	Yes	D.P.A.
4	Catalogue of Airborne Geophysical Surveys (ODM)	N.A.	D.P.A.
5	ODM Mineral Resources Circulars and OGS Mineral Deposits Circulars	Yes	D.P.A.
6	ODM Industrial Mineral Reports	No	D.P.A.
7	Bibliography of Post Precambrian Theses - Karrow (ODM MP 1)	No	D.P.A.
8	Bibliography of Precambrian Theses - Ginn (ODM MP 2)	No	D.P.A.
9	Newspaper Clippings File	Yes	D.P.A.
10	GSC Index to Publications	Yes	D.P.A.
11	OGS Index to Published Maps and Reports - MP 77 and Supplements to MP 77	Yes	D.P.A.
12	OGS Index Maps	Yes	D.P.A.
13	Source Mineral Deposit Records (OGS)	No	D.P.A.
14	Author - Subject Articles File	Yes	D.P.A.
15	ODM/OGS Miscellaneous Papers	No	D.P.A.
16	ODM Geological Circulars	No	D.P.A.
17	OGS Study Series	No	D.P.A.
18	ODM Preliminary Reports	No	D.P.A.
19	ODM Bulletins	Yes	D.P.A.
20	ODM/OGS Open File Reports	Yes	D.P.A.
21	OGS Northern/Southern Ontario Engineering Geology Terrain Studies	Yes	D.P.A.
22	OGS Aggregate Resources Inventory Papers	N.A.	D.P.A.
23	OGS Mineral Potential Maps	Yes	D.P.A.
24	Drill Core Library Catalogue	No	D.P.A.
25	Theses on File, Cobalt	No	D.P.A.
26	Aerial Photographs on File, Cobalt	Yes	D.P.A.
*			

MOREL TOWNSHIP

1

TOPOGRAPHIC MAPS (selected)			
scale	year	name and/or number	by
1:20 000	1982	OBM 20 17 5100 52800 20 17 5200 52800 20 17 5100 52900 20 17 5200 52900	MNR
1:50 000	1976	Matachewan, Ontario, NTS 41P/15	Mapping and Surveys Branch, EMR

MOREL TOWNSHIP

MINERAL COMMODITIES REFERENCE LIST

anh	.....	Anhydrite	grl	.....	Gravel	ra	.....	Radioactive minerals
ank	.....	Ankerite	gyp	.....	Gypsum	RE	.....	Rare Earths
ap	.....	Apatite	hem	.....	Hematite	sd	.....	Sand
arg	.....	Argentite	Fe	.....	Iron	sgl	.....	Sand and gravel
As	.....	Arsenic	IF	.....	Iron Formation	ss	.....	Sandstone
asp	.....	Arsenopyrite	jas	.....	Jasper	scap	.....	Scapolite
asb	.....	Asbestos	ky	.....	Kyanite	shee	.....	Scheelite
ba	.....	Barite	Pb	.....	Lead	serp	.....	Serpentine
be	.....	Beryl	lim	.....	Limonite	sh	.....	Shale
Bi	.....	Bismuth	Li	.....	Lithium	sid	.....	Siderite
bn	.....	Bornite	mgt	.....	Magnetite	si	.....	Silica
Cd	.....	Cadmium	mag	.....	Magnetite	▲ Ag	.....	Silver
calc	.....	Calcite	mc	.....	Malachite	sl	.....	Slate
carb	.....	Carbonate	Mn	.....	Manganese	s:n	.....	Smallite
cc	.....	Chalcocite	mb	.....	Marble	sod	.....	Sodalite
cp	.....	Chalcopyrite	mar	.....	Marcasite	spec	.....	Specularite
ch	.....	Chert	ma	.....	Marl	sp	.....	Sphalerite
clay	.....	Clay	mi	.....	Mica	spd	.....	Spodumene
Co	.....	Cobalt	mo	.....	Molybdenite	s	.....	Sulphides
cob	.....	Cobaltite	Mo	.....	Molybdenum	taic	.....	Talc
Cu	.....	Copper	mon	.....	Monazite	Te	.....	Tellurium
cor	.....	Corundum	ne	.....	Nephele (nepheleine)	th	.....	Thorite
dol	.....	Dolomite	Ni	.....	Nickel	Th	.....	Thorium
ep	.....	Epidote	Nb	.....	Niobium	tl	.....	Titanite
fel	.....	Feldspar	Pd	.....	Palladium	Ti	.....	Titanium
fl	.....	Fluorite (fluor spar)	pent	.....	Pentlandite	tour	.....	Tourmaline
fu	.....	Fuchsite	Pl	.....	Platinum	W	.....	Tungsten
gn	.....	Gaena	py	.....	Pyrite	uran	.....	Uraninite
gl	.....	Garnet	pyl	.....	Pyrochlore	U	.....	Uranium
goe	.....	Goethite	po	.....	Pyrrhotite	verm	.....	Vermiculite
Au	.....	Gold	q	.....	Quartz	Zn	.....	Zinc
grl	.....	Graphite	qcv	..	Quartz carbonate vein	zr	.....	Zircon

ADDITIONS

✱

▲ Solid triangles indicate metal and mineral occurrences shown on the accompanying maps

MINERAL OCCURRENCES

Ref. Letter on Map	(see Exploration Data Map) Name(s)	Mineralization	REFERENCES IN SMDR-Source Mineral Deposit Record MDC-Mineral Deposits Circular, OGS IMR-Industrial Mineral Report, OGS MDI-Mineral Deposit Inventory NMI-National Mineral Inventory	Additional References and/or Remarks
A	Silver Mines of Canada Ltd. (Shayne Consol- dated Mines Ltd.)	AG	MRC 10, p. 411	OGS 1977, Map F.1514
B	Bishop (Bloom Lake, Culver, Pollard)	AG, Co, Cu	MRC 10, p. 411 NMI 41P/10 AG22	ODM 1926, AR vol. 35, pt. 3, p. 58 ODM 1921, Map 30b OGS 1977, Map F.1514 Morel Tp. AF Bishop Bloom Lake Matatchewan Mines Ltd. Pollard, Bloom Lake ODM 1921, AR vol. 30, pt. 3, p. 44 Canadian Mines Handbook, 1936, 1937, 1938, The Northern Miner Press

MINERAL OCCURRENCES

Ref. Letter on Map	(see Exploration Data Map) Name(s)	Mineralization	REFERENCES IN SMDR-Source Mineral Deposit Record MDC-Mineral Deposits Circular, OGS IMR-Industrial Mineral Report, OGS MDI-Mineral Deposit Inventory NMI-National Mineral Inventory	Additional References and/or Remarks

TYPE OF WORK		Numbers below represent the year in which the work was done; e.g., 63 for 1963																
(see Files Index Map) EXPLORATION FILES																		
Ref. No. on Map	COMPANY/AUTHOR (file number)																	
		GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETIC	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETIC	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATION	SELF POTENTIAL	RESISTIVITY	OTHER DATA IN THIS FILE, OR FOOTNOTES
1	Solid Silver Mines Ltd., Haultain and Morel Tps.	63						63										
2	Barnes Group, Bloom Lake claims, Morel and Haultain Tps. Barnes, Norman G.C. and Marlon; Logan; Johnstone, T. Earle; owners leased to Roy Silver (Mr. Pollard Mgr.) 1954				54		54 55 57 58	54 54 59 54										
3	Bishop (Bloom Lake, Pollard) References: NM 41P/10, Ag22 Bishop Pollard, Bloom L.																	
SEE PAGE 14-1..NOTES, FOR ITEMS LISTED BY NUMBER IN THIS COLUMN																		

TYPE OF WORK		Numbers below represent the year in which the work was done: e.g., 68 for 1968																
(see Files Index Map) EXPLORATION FILES																		
Ref. No. on Map	COMPANY/AUTHOR (file number)	GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETIC	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETIC	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATION	SELF POTENTIAL	RESISTIVITY	OTHER DATA IN THIS FILE, OR FOOTNOTES
3	Ontario Gowganda-Cobalt Consolidated Co. Ltd. (7 claims) changed to Bishop Silver Mines of Canada Ltd., 1910 Shields, Wm., of Bloom Lake Silver Mines Ltd., 1923 succeeded by Bloom Lake Matatchewan Mines Ltd. then Bloom Lake Consolidated Mines Ltd. Culver Gold Mines Ltd., 1944-1946	25		07-09			20	21										
				26	26?		20	26										
				26														
				35-														
				38														

SEE PAGE 14-1...NOTES, FOR ITEMS LISTED BY NUMBER IN THIS COLUMN

SEE PAGE 14-1...NOTES, FOR ITEMS LISTED BY NUMBER IN THIS COLUMN



TYPE OF WORK		Numbers below represent the year in which the work was done: e.g., 68 for 1968																	OTHER DATA IN THIS FILE, OR FOOTNOTES
(see Files Index Map) EXPLORATION FILES																			
Ref No on Map	COMPANY/AUTHOR (file number)	GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETIC	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETIC	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATION	SELF POTENTIAL	RESISTIVITY		
3	Pollard, G., Johnstone, K.E., Barnes, N. (39 claims, Morel, Haultain and Shillington Tps.) Paymaster Consoli- dated Mines, 1959 option			51	51	51?		59 62 60											
4	Bloom Lake Matatchewan Mines Ltd., 1925	25			25			26											
5	Pollard Bloom Lake Pollard, G., Johnstone, K.E., Barnes, N. Morel, Haultain and Shillington Tp.			51	51?	51?		59											

SEE PAGE 14-1...NOTES, FOR ITEMS LISTED BY NUMBER IN THIS COLUMN

SEE PAGE 14-1...NOTES, FOR ITEMS LISTED BY NUMBER IN THIS COLUMN

TYPE OF WORK

Numbers below represent the year in which the work was done; e.g., 68 for 1968

(see Files Index Map)
EXPLORATION FILES

Ref
No.
on
Map

COMPANY/AUTHOR
(file number)

GEOLOGICAL

GEOCHEMICAL

TRENCHING,
STRIPPING

DRILLING

ASSAY DATA

UNDERGROUND WORK

PROSPECTUS, NOTES,
CORRESPONDENCE

AIRBORNE
MAGNETIC

AIRBORNE
ELECTROMAGNETIC

AIRBORNE
RADIOMETRIC

GROUND
MAGNETIC

GROUND
ELECTROMAGNETIC

GROUND
RADIOMETRIC

INDUCED
POLARIZATION

SELF POTENTIAL

RESISTIVITY

OTHER DATA IN THIS
FILE, OR FOOTNOTES

SEE PAGE 14-1...NOTES, FOR ITEMS LISTED BY NUMBER IN THIS COLUMN

DRILLHOLE SUMMARY

Drilling Location Number on Map	(see Exploration Data Map) Company Name (file number)	Company Drillhole Number	Date Drilled	Bearing Azimuth	Dip of Hole	Thickness of Overburden FEET	Total Length of Hole FEET	Mineralization Noted in Log	Assay Data Included for
1	Roy Silver Mines Ltd.	3	1958?	S82W	-47	0	32		
		4	1958?	N33E	-44	0	32		
2	Roy Silver Mines Ltd.	1	1958?	N8E	-61	0	42		
		2	1958?	N11E	-57	0	38		
3	Roy Silver Mines Ltd.	?	1957	N72W	-54	0	41		
4	Roy Silver Mines Ltd.	3 or 4?	1957	E5S	-55	0	42	cp	
		3 or 4?	1957	E2S	-47	0	46		
5	Roy Silver Mines Ltd.	13	1955	N7W	-54	0	63		
6	Roy Silver Mines Ltd.	10	1955	N17W	-45	0	64.5		
		11	1955	N56W	-46	0	48.6		
		12	1955	7SW	-47	0	56		
7	Roy Silver Mines Ltd.	6	1955	NO	-43	0	50.6		
		7	1955	N5W	-46	0	74		
		8	1955	N44W	-45	0	50.8		
Two identical logs for this hole - location given as MR 19011 and MR 19008 and maps showing both locations.									

Two identical logs for this hole - location given as MR 19011 and MR 19008 and maps showing both locations.

— indicates core stored at Drill Core Library

DRILLHOLE SUMMARY

Drilling Location Number on Map	(see Exploration Data Map) Company Name (file number)	Company Drillhole Number	Date Drilled	Bearing Azimuth	Initial Dip of Hole	Thickness of Overburden FEET	Total Length of Hole FEET	Mineralization Noted in Log	Assay Data Included for
8	Roy Silver Mines Ltd.	1	1954	S22W	-45	0	47		
9	Roy Silver Mines Ltd.	2	1954	W20S	-45	0	35		
10	Roy Silver Mines Ltd.	3	1954	N35W	-45	0	23		
		4	1954			0	19.5		
		5	1954	N30E	-43	0	38		
11	Bloom Lake Matachewan Mines Ltd.	1	1926?	180	#11-13 - No logs found; holes marked on 1925? map.				
12	Bloom Lake Matachewan Mines Ltd.	2	1926?	155					
13	Bloom Lake Matachewan Mines Ltd.	3	1926?	340					
		4	1926?	020					
14	Pollard, G.	?	1951?				>100'	Ag	
15	Pollard, G.	?	1951?	S7W	-45		75		

— indicates core stored at Drill Core Library

AIRBORNE GEOPHYSICAL SURVEY DATA

Number on File Index Map(s)	by — for — year		Type of Survey	Flight Altitude	Flight Line Direction	Flight Line Spacing

Map Sample Site Reference Number	GEOCHEMICAL SURVEY DATA (see Exploration Data Map)		By	Reference
	Type of Survey	Analysis For		

GEOCHRONOLOGY DATA - AGE DATING

Site No. on Map				
	Method	Material	Reference	Result

AERIAL PHOTOS; MOSAICS; IMAGERY

The following items are available for inspection at the Resident Geologists Office:

(a) Aerial Photographs: 1" = 1/4 mile, black and white, 1970

(b) Photomosaics:

(c) Satellite Imagery:

NEWSPAPER CLIPPINGS FILE (selected)

PAPER	DATE	PAGE	"ARTICLE HEADLINE" OR COMPANY AND/OR SUBJECT
Northern Miner	Nov. 7, 1963		SOLID SILVER MINES LTD.:
Northern Miner	Nov. 21, 1963		First General Public Offering
Northern Miner	Nov. 21, 1963		Solid Silver Mines Starts Surface Work
Northern Miner	Dec. 12, 1963		Solid Silver Mines
Northern Miner	Dec. 12, 1963		Solid Silver Mines to Drill New Group
Northern Miner	Dec. 19, 1963		Solid Silver Mines
Northern Miner	Jan. 30, 1964		Solid Silver Starts Geochemical Survey
Northern Miner	Feb. 20, 1964		Solid Silver Survey Nearing Completion
Northern Miner	Mar. 26, 1964		Solid Silver Drilling

OGS/ODM GENERAL INDEX SEARCH

Words Searched:				
Index Volume	Listing:	Report Volume	Part	Page
1	Bishop Silver Mine, near Gowganda	19	1	117
	Bishop Silver Mines of Canada Ltd.	19	2	180
	officers of	25	1	124
	Bloom Lake, Haultain and Morel Tps.			
	Cobalt	16	2	67
	bloom	16	2	124
	Notes on the area of	16	2	129
	Prospecting on	19	1	52
	Rocks contact Cobalt and Laurentian, photo	19	2	173
	diabase photos	18	2	1,7,8 9,10
	Route to	17	2	19,48
	Silver	18	2	3 1
	Bloom Lake Mines Ltd.			
	Capital and date of charter	16	2	178
	Morel Township	17		36
	Silver claims staked	19	1	52

MOREL TOWNSHIP

OGS/ODM GENERAL INDEX SEARCH

Words Searched:				
SHAYNE CONSOLIDATED MINES LTD. SHIELDS, WILLIAM SILVER MINES OF CANADA LTD. SISSENEY LAKE SOLID SILVER MINES LTD. TOMMY LAKE WOLFSTAN LAKE WOOKEY LAKE				
Index Volume	Listing:	Report Volume	Part	Page
1	Ontario Gowganda - Cobalt Consolidated Co. Capital and date of charter Silver Mines of Canada Ltd. Capital and date of charter Bishop Silver Mine, Morel Tp. Mineralization; operation; veins	19 19	1 1	47 47
2	Bishop Silver Mines of Canada Ltd. Operations. See Bishop s.m., Lawson tp.; Bishop s.m., Milner tp. Bloom Lake, Morel and Haultain tps. Parallelism with lakes in area Rocks on and near granite, notes See also map 30b with	35 30 35 30 35 30	3 3 3 3 3 3	2 14 17 8 9

OGS/ODM GENERAL INDEX SEARCH

Words Searched:					
	Index Volume	Listing:	Report Volume	Part	Page
	2	Bloom Lake Silver Mines Ltd. Capital and date of charter Operations (1923)	33 33	1 7	46 10, 86
		Morel Tp., Tlm. See Bishop s.m. Bloom Lake s.m.			
	3	Bloom Lake Consolidated Mines Ltd. Properties, Matachewan g. area geology Otisse l. sketch map facing	44 44	2 2	42, 43 36
	4	Culver Gold Mines Ltd. Change of name	54	1	50
	5	Bloom Lake, Hauttain tp. Silver Roy Silver Mines Ltd. Capital; officers; operations:	64 60 61 62 63 64	5 2 2 2 2 2	2 96 103 115 137 132

OGS/ODM GENERAL INDEX SEARCH

Words Searched:					
Index Volume	Listing:	Report Volume	Part	Page	
6	Paymaster Consolidated Mines Ltd. Capital; officers; operations: (1955) (1956) (1957) (1958) (1959) Dividends (to 1956) Roy Silver Mines Ltd. Name changed	65 66 67 68 69 66 65	2 2 2 2 2 1 1	69-72 70-73 75-78 52 51-53 15 38	
7	Paymaster Consolidated Mines Ltd. Capital; officers; operations: (1960) (1961) (1962) (1963)	70 71 72 73		53,54 55-57 55-57 55-57	
8	Morel Tp., Timiskaming Dist. silver/cobalt	MRC10		411	
9	Bloom Lake Haultain Tp., Timiskaming Dist. Bloom Lake Group Haultain Tp., Timiskaming Dist. report on property	GR175 GR175 GR175		42,43, 94,97, 98,107 95	

OGS/ODM GENERAL INDEX SEARCH

OGS/ODM GENERAL INDEX SEARCH				
Words Searched:	Index Volume	Listing:	Report Volume	Part
	9	Roy Silver Mines Ltd. see also Tormont Mines Ltd. Haultain Tp., Timiskaming Dist.	GR175	109, 110, 113
		Sold Silver Mines Ltd. Haultain Tp., Timiskaming Dist. report on property	GR175	106- 107

OGS/ODM GENERAL INDEX SEARCH

Words Searched:					
Index Volume	Listing	Report Volume	Part	Page	

Author	Date	SELECTED REFERENCES		Reference	Map Scales and/or Report Pages
		Title			
Andrews, A.J.	1986	Silver vein deposits: summary of recent research	Canadian Journal of Earth Sciences, vol. 23, no. 10	pp. 1459-1462	
Andrews, A.J., Masliwec, A., Morris, W.A., Owstacki, L. and York, D.	1986	The Silver Deposits at Cobalt and Gowganda, Ontario. II: An experiment in age determinations employing radiometric and paleomagnetic measurements	CJES, vol. 23, no. 10	pp. 1507-1518	
Andrews, A.J., Owstacki, L., Kerrich, R. and Strong, D.F.	1986	The Silver Deposits at Cobalt and Gowganda, Ontario. I: Geology, petrography and whole-rock geochemistry	CJES, vol. 23, no. 10	pp. 1480-1506	
Collins, W.H.	1909	Preliminary Report on the Gowganda Mining Division, Dist. of Nip., Ont.	GSC Separate Report 1075 GSC Map 1076	1:63 360	
Collins, W.H.	1909	Montreal River District, Ont.	GSC Sum. Rept. 1908	pp. 115-120	
Collins, W.H.	1911	Montreal River District, Ont.	GSC Sum. Rept. 1910	pp. 196-202	
Collins, W.H.	1914	The Geology of the Gowganda Mining Division	GSC Memoir 33 GSC Map 64A	1:63 360	

SELECTED REFERENCES				
Author	Date	Title	Reference	Map Scales and/or Report Pages
Cooke, H.C.	1918	Montreal River District, Northern Ontario	GSC Summary Report 1917, pt. E	pp. 16-18
Cooke, H.C.	1919	Geology of Matachewan District, Northern Ontario	GSC Memoir 115 GSC Map 1793	1:63 360
GSC	1956	Matachewan, Ontario Aeromagnetic Map	GSC Map 287G	1:63 360
GSC	1981	Magnetic Anomaly Map, Timiskaming-Kapuskasing Region	GSC Map 1563A	1:1 000 000
GSC	1988	Gravity-Bouguer Anomalies, Sud., Ont. and Quebec	GSC Map NL-17-GR(BA)	1:1 000 000
Ginn, R.M.	1964	Timmins-Kirkland Lake Sheet, Cochrane, Sud. and Temiskaming Dist., Ont., Geological Compilation Series	ODM Map 2046	1:253 440
Goodz, M.D., Watkinson, D.H., Smejkal, V. and Pertold, Z.	1986	Sulphur-isotope geochemistry of silver-sulpharsenide vein mineralization, Cobalt, Ontario	CJES, vol. 23, no. 10	pp. 1551-1567
Gupta, V.K. Wadge, D.R.	1980	Bouguer Gravity and Generalized Geological Map, Temagami-Englehart Area, NTS 31M/W, 41P/E, Tim. + 2AL Dists., Ont.	OGS Map P.2296	1:100 000
Gupta, V.K.	1981	Bouguer Gravity and Generalized Geological Map of Gogama-Gowganda Area, NTS 41P, Tim. and Sud. Dist., Ont.	OGS Map P.2481	1:100 000

Author	Date	SELECTED REFERENCES		Reference	Map Scales and/or Report Pages
		Title			
Hornbrook, E.H.W. & Friske, P.W.B.	1988	Regional Lake Sediment and Water Geochemical Reconnaissance Data, Gogama Area, Ont.		GSC OFR 1640	
Hunter & Assoc. Ltd.	1984	Peat and Peatland Evaluation of the New Liskeard Area, NTS 31M/12 and 41P/E, Tim. + 2 other Dist., Ont.		OGS OFR 5486	3 volumes
Jolly, W.T.	1978	Metamorphic History of the Archean Abitibi Belt		GSC Paper 78-10	pp. 63-78
Kerrich, R.; Strong, D.F.; Andrews, A.J. and Owsicki, L.	1986	The Silver Deposits at Cobalt and Gowganda, Ontario III: Hydrothermal regimes and source reservoirs-evidence from H,O,C, and SR isotopes and fluid inclusions		CJES, vol. 23, no. 10	pp. 1519-1550
Kretschmar, U.; Kretschmar, D.	1980	Talc, Magnesite and Asbestos Deposits in the Kirkland Lake-Timmins Area, NTS 31M, 32D, 41O, 41P, 42A, 42B, Tim. + 2AL Dist., Ont.		OGS OFR 5310	
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		Title			
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Legun, A.	1984	Huronian Stratigraphy and Sedimenta- tion in the Cobalt area, NTS 31M/W and 41P, Ont.		OCS OFR 5508	
Long, D.G.F., Leslie, C.A.	1986	The Placer Gold Potential of the Early Apehian Gowganda Formation along the Northern Margin of the Cobalt Embayment, Ontario, with Comments on Associated Concentrations of Silver and Copper		OCS OFR 5608	
Lovell, H.L., Ploeger, F.	1978	Morel Township, NTS 41P/15, Tim. Dist., Ont., Kirkland Lake Data Series		OCS Map P.1557	1:15 840
Mansinha, L., Wilkinson, D.A.	1983	Grant No. 109: Interpretation of Gravity Data from New Liskeard, NTS 31M/W, 41P/E, Ont.		OCS OFR 5440	
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Parks, W.A.	1907	The Geology of a District from Lake Timiskaming Northward		GSC Sum. Rept. 1904, vol. XVI, pt. A	pp. 198- 225

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Reid, J.A.	1943	Mineral Resources of the Timiskaming Silver-Cobalt Area, Ontario	ODM Bulletin No. 134		
Roed, M.A.	1980	Elk Lake Area, NTS 41P/NE, Tim. Dist., Ont.	NOEGTS 83		
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Sinclair, W.D.	1979	Copper-molybdenum Occurrences of the Matachewan Area, Ontario	GSC Current Research Paper 79-1A	pp. 253- 258	
Springer, J.	1977	Ontario Mineral Potential, Gogama Sheet and part of Ville Marie Sheet, NTS 41P, 31M/W, Tim. and Sud. Dist., Ont.	OGS Map P.1514	1:250 000	

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Symons, D.T.A., Stupavsky, M.	1983	Grant No. 143: Analysis of Aero- magnetic Anomalies over Algoman-Type Iron Formations		OGS OFR 5476	
Thorpe, R.I., Goodz, M.D., Jonasson, I.R. and Blenkinsop, J.	1986	Lead-isotope study of mineralization in the Cobalt district, Ontario		Canadian Journal of Earth Sciences, vol. 23, no. 10	pp. 1568- 1575

Note
No.

NOTES

The exploration data map shows only the most important minerals found at each site. All the minerals noted are listed in the mineral occurrences or the drill hole data.

On the maps, only the areas for which work has been submitted to the Ministry are shown and thus a company may hold, or have held in the past, more ground than is shown.

No present or past producers.

The township was closed to staking in 1978 due to the Bear Island Indian Caution. Part of Morel Township will be re-opened for staking on April 1, 1990.

ADDENDA

MOREL TOWNSHIP

CONVERSION FACTORS

Conversion from SI to Imperial			Conversion from Imperial to SI		
SI Unit	Multiplied by	Gives	Imperial Unit	Multiplied by	Gives
LENGTH					
1 mm	0.039 37	inches	1 inch	25.4	mm
1 cm	0.393 70	inches	1 inch	2.54	cm
1 m	3.280 84	feet	1 foot	0.304 8	m
1 m	0.049 709 7	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	1.609 344	km
AREA					
1 cm ²	0.155 0	square inches	1 square inch	6.451 6	cm ²
1 m ²	10.763 9	square feet	1 square foot	0.092 903 04	m ²
1 km ²	0.386 10	square miles	1 square mile	2.589 988	km ²
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
VOLUME					
1 cm ³	0.061 02	cubic inches	1 cubic inch	16.387 064	cm ³
1 m ³	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m ³
1 m ³	1.308 0	cubic yards	1 cubic yard	0.764 555	m ³
CAPACITY					
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	4.546 090	L
MASS					
1 g	0.035 273 96	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 75	ounces (troy)	1 ounce (troy)	31.103 476 8	g
1 kg	2.204 62	pounds (avdp)	1 pound (avdp)	0.453 592 37	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	907.184 74	kg
1 t	1.102 311	tons (short)	1 ton (short)	0.907 184 74	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	1016.046 908 8	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	1.016 046 908 8	t
CONCENTRATION					
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

1 ounce (troy) per ton (short)	20.0	pennyweights per ton (short)
1 pennyweight per ton (short)	0.05	ounces (troy) per ton (short)

One gram(g) per tonne is equivalent to one part per million (1 ppm).

Note: Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries, published by the Mining Association of Canada in cooperation with the Coal Association of Canada.

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POJ 1C0

MAP LEGENDS

A. FILES INDEX MAP

FILE AREAS See pages 4-1,2 of text

- ☒  Reference number is always inside work area outlined. See listing in text, pages.
- ☐  Small area of exploration data
- ☐  File covers whole township or area
- ☐ 

B. EXPLORATION DATA MAP

MINERAL OCCURRENCES: See pages 3-1,2... of text

- ☐  Mineral occurrence at surface, with reference letter
- ☒  Mineral occurrence with shaft, depth given with reference letter
- ☐  Mineral occurrence reported but exact location uncertain, with reference letter
- ☐  Mineralized float with reference letter
- ☐  Mineral occurrence encountered in drilling, with reference letter
- ☐ 

DRILLHOLES: See pages 5-1,2... of text

- ☒  Location of single drillhole, with reference number
- ☒  Location of group of closely spaced drillholes, with reference number
- ☐  Drillhole, exact location uncertain, with reference number
- ☐  Property with underground drillholes in this general area, with reference number
- ☐  Property with drillholes which have not been plotted on map, with reference number
- ☐  Reverse circulation drillhole; churn drilling, with reference number
- ☐ 

GEOCHEMICAL: See pages 7-1,2... of text

- ☐  Geochemical sample site, with reference number
- ☐  Area of geochemical sampling, with reference number
- ☐ 

GEOPHYSICAL ANOMALIES

Airborne Surveys: See pages 6-1,2... of text

- ☐  Airborne magnetic anomaly
- ☐  Airborne electromagnetic anomaly
Length of anomaly along flight line
- ☐  Airborne electromagnetic anomaly
Location of anomaly along flight line
- ☐  Airborne electromagnetic anomaly
Conductor axis: definite, probable, possible
- ☐  Airborne electromagnetic anomaly
Conductor axis: Location of flight lines uncertain
- ☐  Airborne radiometric anomaly

Ground Surveys

- ☐  Ground magnetic anomaly
- ☐  Ground electromagnetic anomaly
(VL - Vertical loop; HL - Horizontal loop
VLF - Very low freq.; Turam; JEM -
Crone Em - 16)
- ☐  Ground radiometric anomaly
- ☐  Induced polarization anomaly
- ☐  Self potential anomaly
- ☐  Audio-frequency magnetic anomaly
(total intensity)
- ☐  Resistivity anomaly
- ☐  Gravity anomaly
- ☐ 

GEOCHRONOLOGICAL DATA: See page 8 of text

- ☐  Age dating material sampling site, with reference number
- ☐ 

MISCELLANEOUS DATA

- ☒  Trenching, pit
- ☒  Adit
- ☐  Sand and/or gravel pit
- ☐ 
- ☐  Rock quarry
- ☐  Open pit
- ☐ 
- ☐ 

**MAPS
NOT
FILMED**

**CARTES
OMISES**